STATEMENT OF WORK
for
The Multifunctional Information Distribution System (MIDS)
Joint Tactical Radio System (JTRS)
Systems Engineering and Integration (SE&I) Support
November 2020

1.0 SCOPE

This Statement of Work (SOW) defines the Contractor tasks required for the Multifunctional Information Distribution System (MIDS) Joint Tactical Radio System (JTRS) Systems Engineering and Integration (SE&I) services.

2.0 APPLICABLE DOCUMENTS

2.1 Specifications

In Accordance With (IAW) each Delivery Order (DO).

2.2 Military Handbooks and Standards

IAW with each DO.

2.3 Industry Standards.

IAW with each DO.

2.4 Other Publications.

IAW with each DO.

3.0 REQUIREMENTS

The Contractor, in conjunction with the other contractor, shall provide the technical support for SE&I Services in accordance with Delivery Orders (DOs) issued under this SE&I SOW by the Procuring Contracting Officer (PCO) for the MIDS JTRS terminal. For the purposes of this SOW, Concurrent Multi Netting with Concurrent Retention Receive (CMN-4), Tactical Targeting Network Technology (TTNT), the F-22, and the core configurations of the MIDS JTRS Terminal are hereafter stated as the MIDS JTRS Terminal. The Contractor shall provide personnel with proper skills and knowledge to support and perform specific DO requirements. If requested by the Government by issuance of a DO, this technical support and effort may include the tasks listed below:

3.1 Management

3.1.1 Program Manager

The Contractor shall designate a manager who shall be the single point of contact with overall responsibility for control and coordination of all work performed. This manager shall act as the single focal point within the Contractor's activity for all program status information, program planning, control, and reporting. The contractor shall submit organizational charts that depict task leads and their roles for each DO under this effort to the Contracting Officer's Representative (COR)/Assistant COR (ACOR)

3.1.2 Program Planning, Control and Reporting

The Contractor shall plan, control, and report activities necessary to accomplish overall contract requirements. The Contractor shall ensure that the Contractor and its subcontractors adhere to all plans and procedures required by this SOW and the Contract Data Requirements Lists (CDRLS) approved by the Government.

A clear line of project authority shall exist between all organizational elements and the program manager. The Contractor shall ensure that a clear division exists within its organization between tasks accomplished under this SOW and tasks associated with other MIDS JTRS-related contracts.

3.1.3 Program Management Reviews (PMRs) for Block Cycles (BC)

When requested by the Government, the Contractor, in conjunction with the other contractor, shall prepare for, attend, present and administratively support PMRs for each BC.

The Contractor shall develop agendas and briefing inputs for the PMR. The Government shall have the right to modify or add items to the PMR agenda. At the PMR, the Contractor shall determine and report detailed program status information relative to the BC requirements and CDRLs. The contractor shall prepare briefs and record and track Action items In Accordance With (IAW) Appendix B.

3.1.4 Quality Assurance (QA)

The Contractor shall implement a QA program in accordance with ISO 9001:2008 and ISO 90003:2004. The Contractor shall be certified at a minimum of a level three of the Software Engineering Institute (SEI) Capability Maturity Model Integration (CMMI) for software development.

3.1.5 Contractor Cooperation

The Contractor, along with any other contractor performing MIDS JTRS SE&I as a result of this SOW (herein after referred to as the "other contractor"), shall cooperate to provide the support services as required by this SOW.

The Contractor shall maintain a close liaison with any other MIDS JTRS Systems Engineering and Integration (SE&I) software and Production contractors and the Government, on matters pertaining to the interface control, interoperability, and interchangeability of the MIDS JTRS Terminals through the following MIDS JTRS meetings: Technical Working Group (TWG), Problem Review Board (PRB)/Problem Report Review (PRR), Joint Logistics Working Group (JLWG) and Interface Control Working Group (ICWG). Accordingly, the Contractor hereby agrees that:

a) In performance of this contract, the Contractor shall participate with the other MIDS JTRS SE&I software and Production contractors and the Government in the MIDS JTRS TWG, PRB/PRR and ICWG. Incident to its participation in the TWG, PRB/PRR, JLWG, and

ICWG, the Contractor agrees to disclose to other MIDS JTRS SE&I software and Production contractors, after the execution of suitable proprietary information protection agreements, data and software requested by the TWG, PRB/PRR, JLWG or ICWG that are relevant and necessary to ensure a complete and successful agreement on the technical wording of potential Functional Baseline (FBL) and Allocated Baseline (ABL) Engineering Change Proposals (ECPs). The JLWG shall be the primary forum for the implementation of the Logistics Integrated Product Team (IPT) concept. JLWG meetings will be scheduled semiannually at a location identified by the Government. The purpose of the JLWG is to provide contractor status of the retrofits and repairs to include technical and manufacturing issues encountered, delivery status, and the plans for resolving identified issues.

b) In the event that the Contractor considers any direction, or other conduct by the TWG, PRB/PRR, JLWG and ICWG, or any member thereof, to constitute a change to this contract, it shall refrain from acting thereon, and shall so notify the Procuring Contracting Officers (PCOs) in accordance with the terms and conditions of the "Notification of Changes" clause of this contract.

c) In addition to participating in the TWG, PRB/PRR, JLWG and ICWG, the Contractor shall establish associate contractor relationships, as described below, to ensure the successful completion of interface control documentation.

d) All data and software to which limited/restricted rights apply that is furnished by the Contractor to other MIDS JTRS SE&I software and Production contractors, and the Government through the TWG, PRB/PRR, JLWG and ICWG shall bear the appropriate markings as delineated in DFARS 252.227-7013 and 252.227-7014. Except with the prior written permission of the Contractor, the Government shall not release, use, or disclose, in whole, or in part, such data or software for any purpose other than the performance of the interface requirements of this contract. This provision, however, shall not limit the rights of the Government in such data and software that are lawfully obtained from another source.

e) Furthermore, the Contractor hereby agrees that it shall use data and software to which limited/restricted rights apply, whether provided by the Government, other MIDS JTRS SE&I software and Production contractors through the TWG, PRB/PRR, JLWG or ICWG, solely for the purposes of fulfilling the TWG, PRB/PRR, JLWG and ICWG requirements detailed in this contract, and agrees to indemnify and hold the Government harmless against any claim asserted by any party arising out of the Contractor's use of such data and software. This provision, however, shall not limit any right of the Contractor to use such data and software that is lawfully obtained from some other source.

f) The Contractor shall be responsible for notifying the Government as to any information, including data and software, requested at the TWG, PRB/PRR, JLWG and ICWG that the Contractor believes to be of a limited/restricted rights nature.

g) Nothing in this clause shall be construed as limiting the parties' rights under the Rights in Technical Data and Computer Software clauses contained in this contract.

h) While the Government will attempt to facilitate the exchange of information amongst the MIDS JTRS SE&I software and Production contractors and the Government, the Contractor is solely responsible for obtaining and providing all information necessary to successfully perform the requirements of this contract.

The Contractor shall enter into Associate Contractor Agreements (ACA) with the awardees of all U.S. MIDS JTRS SE&I software and Production contract(s). The ACA shall address, at a minimum, the requirements identified in this clause. The PCOs will notify the Contractor of the names of the MIDS JTRS SE&I software and Production contract awardees. Upon notification, the Contractor shall, within 30 calendar days, execute and deliver signed ACAs that comply with all the requirements of this clause, with all the entities contained in the notification, to the PCOs. Fulfillment of this requirement is a "material requirement" of this contract. Accordingly, the Contractor agrees that in the event that a copy of the required ACAs are not provided to the PCOs within 30 calendar days after the PCOs' notification described above, the PCOs shall have the right to reduce or suspend progress payments or performance based payments, as applicable, or terminate this contract for default. Any subsequent modifications to the ACAs shall be submitted to the PCOs within 30 calendar days after execution. The Contractor shall ensure that the ACAs remain in effect through the period of performance of this contract, which includes the periods of performance for any and all delivery/task orders.

3.1.6 Software Development Plan (SDP)

The Contractor, in conjunction with the other contractor, shall define a software development approach in accordance with Institute of Electrical and Electronics Engineers/Electronic Industries Alliance (IEEE/EIA) 12207-2008. This approach shall be documented in a SDP. (CDRL B001)

3.1.6.1 Software Development Compliance

The Contractor, in conjunction with the other contractor, shall ensure the overall Terminal software architecture and the Terminal Computer Software Configuration Items (CSCIs), as designed and implemented, are in compliance with the JTRS Software Communications Architecture (SCA) and APIs/JTRS Standards, including approved MIDS JTRS branches. At the time software source code is written, the contractor, in conjunction with the other contractor, shall ensure newly written source code and modifications to existing CSCIs comply with MIDS JTRS TSRD Rev 2.0 and the following: (1) Memorandum for the Joint Tactical Radio System (JTRS) Network Enterprise Domain (NED): "SWD Requirements," (2) National Security Agency Guidance for the Use of Automated Code Generation Tools on Joint Tactical Radio System Software Defined Radios, (3) National Security Agency's Joint Tactical Radio System Enterprise Guidance for Unused or Unreachable Code and Variables, and (4) Memorandum for the Joint Tactical Radio System (JTRS) Network Enterprise Domain (NED): "Cyclomatic Complexity."

3.1.6.2 National Security Agency (NSA) Automated Source Code Analysis Tools and Settings

In order to enable the contractors to address source code security requirements compliance issues before the source code is delivered to the Government for Information Assurance (IA)

assessment, the contractorshall use the NSA software IA assessment tool scripts to assess source code for security requirements compliance and resolve any issues found.

3.1.6.3 Software Signature and Encryption

The contractor, in conjunction with the other contractor, shall ensure the software development process documented in the SDP includes signature and encryption of crypto and non-crypto files as well as testing of signed and encrypted files. The process shall address both Non-Cryptographic Subsystem (CSS) CSCI Files and CSS CSCI Files:

3.1.6.3.1 Non-CSS Pre BC1+ Integrated Build and earlier CSCI Files

a. Pre-process appropriate files into the required format for signature by the NSA;
b. Deliver the pre-processed files to NSA for signature in the agreed upon format;
c. Receive signed, pre-processed files from NSA;
d. Post-process files as required for encryption;
e. Signed files shall be encrypted at either the contractor's facility or an approved government facility using a Government approved non-CSS Software Encryption Tools and process;
f. Perform validation and verification testing of the signed and encrypted non-CSS files by ensuring that the files load onto the terminal and, after shutdown and restart of the terminal, the terminal appropriately starts and the Link 16 Waveform achieves fine synchronization with another NSA certified Link 16 terminal (e.g. MIDS-LVT, MIDS JTRS).

3.1.6.4 CSS CSCI Pre BC1+ Integrated Build and earlier CSCI Files and both CSS and Non-CSS Integrated Build 2.0 and later CSCI Files

a. The files shall be encrypted at either the contractor's facility or an approved government facility using a Government approved software encryption tool and process;
b. Deliver the encrypted files to the NSA for signature in the agreed upon NSA format;
c. Receive signed files from the NSA;
d. Perform any necessary post processing;
e. Perform validation and verification testing of the signed and encrypted files by successfully completing the applicable acceptance test for formal delivery of the software build to the Government.

3.1.6.5 Software Security

For all security critical and security related software within the INFOSEC boundary, the Contractor, in conjunction with the other contractor, is responsible to design and develop the software per the requirements set forth by the Government. As per the TSRD, all software assessments shall be performed in compliance with the Software Analysis and Assessment Process Description (SAAPD).

The Contractor shall be responsible for the following:

a. Run static and dynamic code analysis tools early and throughout the code development cycle. The Government has evaluated several code analysis tools and can provide settings for the evaluated tools. However, in the event that the tool is not on the Government's evaluated list, the NSA, or Government laboratory on behalf of the NSA, can assist with the development of settings for chosen static and dynamic analysis tools. Additionally, the Government will provide NSA software IA assessment scripts to be used with *Understand* tool by the contractors to assess

all new and modified source code and any source code impacted by new and modified source code for security requirements compliance in order to help resolve any issues found prior to delivering the source code to the Government for IA assessment. The Contractor, shall deliver a Software and Programmable Logic Evaluation Report (SPLER) per software type (OE, WF, CSS), in preparation for NSA delta software-IA assessment.
(CDRL B002)
b. Deliver the entire source code for the build/release to the NSA for review. Only analysis results for the changes and new functions will be reported.
c. Deliver the applicable DIFF files, entire source code files, and applicable draft software version description document (SVD) as one package with the Self-Assessment Report (SPLER, CDRL B002)
d. Generate proper source code IA metrics and deliver to the Government as required in section 3.4.1. The contractor shall maintain a record of those "false positives," with justification.
e. Identify and track all defects and correct each defect prior to submission of source code to the Government for IA assessment. For all defects or unmet security requirements (e.g. unused code; IF statements without an associated ELSE; less than 50% code-to-comment ratio; all paths not tested or cyclomatic complexity > 10; etc), provide mitigation and/or written justification for why the defect is a non-issue in the source code (as appropriate) and the SPLER.
f. Ensure that there will be no potential buffer overflows in critical software.
g. Make available a report from the tools listing buffer overflows identified and corrected per the TSRD
h. Ensure the code will undergo testing to verify unusual or unexpected conditions are handled properly.
i. Exception handling shall include checking the value or status flag returned from a routine after execution.
j. Make available test results for exception handling routines per the TSRD.
k. Ensure all extraneous code, which includes debug code, is physically removed from the final version of delivered code.
l. Make available a report from the tools listing extraneous code identified and removed per the TSRD. For rare exceptions, list the mitigation strategy.
m. Ensure proper physical separation of critical from non-critical functions and data. However, when physical separation is not possible or prohibitive, then an approved logical separation scheme shall be implemented.
n. At a minimum, every routine, unit class, etc, within the INFOSEC Boundary that performs a security function, shall be subject to the Peer Review process during the coding phase of software/firmware development.
o. Update the Waveform WSSR, as necessary, to reflect applicable changes.
(CDRL B003)

3.1.7 Travel

Travel requirements shall be identified in individual DOs under this SOW. As locations/trips are identified for various meetings in support of the DO requirements; the Contractor shall seek travel authorization in accordance with the below:

(a) Contractor Request and Government Approval of Travel

Any travel under this contract shall be specifically requested in writing, by the contractor and authorized by the COR/ACOR prior to incurring any travel costs. The request shall include as a minimum, the following:

(1) Contract number
(2) Date, time, and place of proposed travel
(3) Purpose of travel and how it relates to the contract
(4) Contractor's estimated cost of travel
(5) Name(s) of individual(s) traveling
(6) A breakdown of estimated travel and per diem charges and:
(7) Balance of funding of proposed CLIN

(b) General

(1) The costs for travel, subsistence, and lodging shall be reimbursed to the contractor only to the extent that it is necessary and authorized for performance of the work under this contract. The costs for travel, subsistence, and lodging shall be reimbursed to the contractor in accordance with the Federal Acquisition Regulation (FAR) 31.205-46, which is incorporated by reference into this contract. As specified in FAR 31.205-46(a)
(2), reimbursement for the costs incurred for lodging, meals and incidental expenses (as defined in the travel regulations cited subparagraphs (b)(1)(i) through (b)(1)(iii) below) shall be considered to be reasonable and allowable only to the extent that they do not exceed on a daily basis the maximum per diem rates in effect at the time of travel as set forth in the following:

(i) Federal Travel Regulation prescribed by the General Services Administration for travel in the contiguous 48 United States;

(ii) Joint Travel Regulation, Volume 2, DoD Civilian Personnel, Appendix A, prescribed by the Department of Defense for travel in Alaska, Hawaii, The Commonwealth of Puerto Rico, and the territories and possessions of the United States; or

(iii) Standardized Regulations, (Government Civilians, Foreign Areas), Section 925, "Maximum Travel Per Diem Allowances in Foreign Areas" prescribed by the Department of State, for travel in areas not covered in the travel regulations cited in subparagraphs (b)(1)(i) and (b)(1)(ii) above.

(2) Personnel in travel status from and to the contractor's place of business and designated work site or vice versa, shall be considered to be performing work under the contract, and contractor shall bill such travel time at the straight (regular) time rate; however, such billing shall not exceed eight hours per person for any one person while in travel status during one calendar day.

(c) Per Diem

(1) The contractor shall not be paid per diem for contractor personnel who reside in the metropolitan area in which the tasks are being performed. Per diem shall not be paid on services performed at contractor's home facility and at any facility required by the contract, or at any

location within a radius of 50 miles from the contractor's home facility and any facility required by this contract.

(2) Costs for subsistence and lodging shall be paid to the contractor only to the extent that overnight stay is necessary and authorized in writing by the Government for performance of the work under this contract per paragraph (a). When authorized, per diem shall be paid by the contractor to its employees at a rate not to exceed the rate specified in the travel regulations cited in FAR 31.205-46(a)(2) and authorized in writing by the Government. The authorized per diem rate shall be the same as the prevailing locality per diem rate.

(3) Reimbursement to the contractor for per diem shall be limited to payments to employees not to exceed the authorized per diem and as authorized in writing by the Government per paragraph (a). Fractional parts of a day shall be payable on a prorated basis for purposes of billing for per diem charges attributed to subsistence on days of travel. The departure day from the Permanent Duty Station (PDS) and return day to the PDS shall be 75% of the applicable per diem rate. The contractor shall retain supporting documentation for per diem paid to employees as evidence of actual payments, as required by the FAR 52.216-7 "Allowable Cost and Payment" clause of the contract.

(d) Transportation

(1) The contractor shall be paid on the basis of actual amounts paid to the extent that such transportation is necessary for the performance of work under the contract and is authorized in writing by the Government per paragraph (a).

(2) The contractor agrees, in the performance of necessary travel, to use the lowest cost mode commensurate with the requirements of the mission and in accordance with good traffic management principles. When it is necessary to use air or rail travel, the contractor agrees to use coach, tourist class or similar accommodations to the extent consistent with the successful and economical accomplishment of the mission for which the travel is being performed. Documentation must be provided to substantiate non-availability of coach or tourist if business or first class is proposed to accomplish travel requirements.

(3) When transportation by privately owned conveyance (POC) is authorized, the contractor shall be paid on a mileage basis not to exceed the applicable Government transportation rate specified in the travel regulations cited in FAR 31.205-46(a)(2) and is authorized in writing by the Government per paragraph (a).

(4) When transportation by privately owned (motor) vehicle (POV) is authorized, required travel of contractor personnel, that is not commuting travel, may be paid to the extent that it exceeds the normal commuting mileage of such employee. When an employee's POV is used for travel between an employee's residence or the Permanent Duty Station and one or more alternate work sites within the local area, the employee shall be paid mileage for the distance that exceeds the employee's commuting distance.

(5) When transportation by a rental automobile, other special conveyance or public conveyance is authorized, the contractor shall be paid the rental and/or hiring charge and operating expenses incurred on official business (if not included in the rental or hiring charge). When the operating expenses are included in the rental or hiring charge, there should be a record of those expenses available to submit with the receipt. Examples of such operating expenses include: hiring charge (bus, streetcar or subway fares), gasoline and oil, parking, and tunnel tolls.

(6) Definitions:

(i) "Permanent Duty Station" (PDS) is the location of the employee's permanent work assignment (i.e., the building or other place where the employee regularly reports for work.

(ii) "Privately Owned Conveyance" (POC) is any transportation mode used for the movement of persons from place to place, other than a Government conveyance or common carrier, including a conveyance loaned for a charge to, or rented at personal expense by, an employee for transportation while on travel when such rental conveyance has not been authorized/approved as a Special Conveyance.

(iii) "Privately Owned (Motor) Vehicle (POV)" is any motor vehicle (including an automobile, light truck, van or pickup truck) owned by, or on a long-term lease (12 or more months) to, an employee or that employee's dependent for the primary purpose of providing personal transportation, that:

(a) is self-propelled and licensed to travel on the public highways;
(b) is designed to carry passengers or goods; and
(c) has four or more wheels or is a motorcycle or moped.

(iv) "Special Conveyance" is commercially rented or hired vehicles other than a POC and other than those owned or under contract to an agency.

(v) "Public Conveyance" is local public transportation (e.g., bus, streetcar, subway, etc) or taxicab.

(iv) "Residence" is the fixed or permanent domicile of a person that can be reasonably justified as a bona fide residence.

EXAMPLE 1: Employee's one way commuting distance to regular place of work is 7 miles. Employee drives from residence to an alternate work site, a distance of 18 miles. Upon completion of work, employee returns to residence, a distance of 18 miles.

In this case, the employee is entitled to be reimbursed for the distance that exceeds the normal round trip commuting distance (14 miles). The employee is reimbursed for 22 miles (18 + 18 - 14 = 22).

EXAMPLE 2: Employee's one way commuting distance to regular place of work is 15 miles. Employee drives from residence to an alternate work site, a distance of 5 miles. Upon completion of work, employee returns to residence, a distance of 5 miles.

In this case, the employee is not entitled to be reimbursed for the travel performed (10 miles), since the distance traveled is less than the commuting distance (30 miles) to the regular place of work.

EXAMPLE 3: Employee's one way commuting distance to regular place of work is 15 miles. Employee drives to regular place of work. Employee is required to travel to an alternate work site, a distance of 30 miles. Upon completion of work, employee returns to residence, a distance of 15 miles.

In this case, the employee is entitled to be reimbursed for the distance that exceeds the normal round trip commuting distance (30 miles). The employee is reimbursed for 30 miles (15 + 30 + 15 - 30 = 30).

EXAMPLE 4: Employee's one way commuting distance to regular place of work is 12 miles. In the morning the employee drives to an alternate work site (45 miles). In the afternoon the employee returns to the regular place of work (67 miles). After completion of work, employee returns to residence, a distance of 12 miles.

In this case, the employee is entitled to be reimbursed for the distance that exceeds the normal round trip commuting distance (24 miles). The employee is reimbursed for 100 miles (45 + 67 + 12 - 24 = 100).

EXAMPLE 5: Employee's one way commuting distance to regular place of work is 35 miles. Employee drives to the regular place of work (35 miles). Later, the employee drives to alternate work site #1 (50 miles) and then to alternate work site #2 (25 miles). Employee then drives to residence (10 miles).

In this case, the employee is entitled to be reimbursed for the distance that exceeds the normal commuting distance (70 miles). The employee is reimbursed for 50 miles (35 + 50 + 25 + 10 - 70 = 50).

EXAMPLE 6: Employee's one way commuting distance to regular place of work is 20 miles. Employee drives to the regular place of work (20 miles). Later, the employee drives to alternate work site #1 (10 miles) and then to alternate work site #2 (5 miles). Employee then drives to residence (2 miles).

In this case, the employee is not entitled to be reimbursed for the travel performed (37 miles), since the distance traveled is less than the commuting distance (40 miles) to the regular place of work.

3.1.8 Telecommunications Security Approval for Use

The Contractor, in conjunction with the other contractor, shall take all the actions and provide all the information required to comply with JTRS-UPA-022-06, MIDS JTRS MOA-Y221 1-2019-057, MIDS JTRS TSRD Rev 2.0 and C-M(55) 15 and maintain Telecommunications Security Approval for Use. The term "Telecommunication Security" and the terms "Communications Security" and "COMSEC [Communications Security]" as used in this SOW are equivalent. As part of this effort, the Contractor shall plan and conduct regression verifications of the telecommunication functions of the MIDS JTRS Terminal as required by NSA in accordance with MIDS JTRSTSRD Rev 2.0 and the following: (1) Memorandum for the Joint Tactical Radio System (JTRS) Network Enterprise Domain (NED): "SWD Requirements," (2) National Security Agency Guidance for the Use of Automated Code Generation Tools on Joint Tactical Radio System Software Defined Radios, (3) National Security Agency's Joint Tactical Radio System Enterprise Guidance for Unused or Unreachable Code and Variables, and (4) Memorandum for the Joint Tactical Radio System (JTRS) Network Enterprise Domain (NED): "Cyclomatic Complexity." The Contractor, in conjunction with the other contractor, shall coordinate the requirements for these telecommunications security regression verifications with the applicable security authority. The Contractor, in conjunction with the other contractor, shall update documentation as required by the NSA to achieve approval for use.
(CDRLs B004, B006, B008, B009, B00A, B033, B00D, B00E, B00F, B00G, B00J)

Public release of information relating to COMSEC and its uses shall be restricted in dissemination to Contractor personnel and Government personnel involved in the Contract. Any proposed release of COMSEC information relating to this Contract into the public domain shall be forwarded, via the Procuring Contracting Officers, to NSA. The term "release" includes, but is not limited to: newspaper articles, company newsletters, contract announcements, advertisements, brochures, photographs, motion-picture films, technical papers, unclassified presentations at symposia, speeches, displays, etc., on any COMSEC phase related to this Contract.

The Contractor agrees to obtain written approval from the NSA through the PCOs on behalf of the MPO before assigning work or granting access to any foreign national or foreign representative to data related to the following items/subject matter, whether such data is provided by the Government or generated under this Contract in accordance with DD 254, Contract Security Classification Specification:

1. U-TVB CTIC/DS-101 Hybrid (CDH)
2. Cryptographic Keys
3. AN/PYQ-10, Simple Key Loader (SKL)
4. Security and cryptographic related specifications, publications, and software
5. E-HVM, MIDS Signal Message Processor (SMP) (all variants) & documents
6. PSIAM Crypto Device
7. Data Management Device (DMD) User Application Software
8. COMSEC documents and materials
9. MIDS JTRS NSA Test TEKs and TSKs
10. MIDS JTRS NSA Test FEKs
11. MIDS JTRS NSA Test KEKs
12. KGV-8-(E2), Miniature Secure Data Unit (SDU)

13. KOV-55, LCM (all variants) and documents

For purposes of this section a foreign national is anyone who is not a citizen of the United States. A foreign representative is anyone (regardless of nationality) who is acting as an official, agent, or employee of (i) a foreign owned/controlled/influenced firm, corporation, or person or (ii) a foreign government. Nothing in this clause is intended to waive any requirement imposed by any other US Government agency with respect to employment of either foreign nationals or foreign representatives or to export control.

3.2 Engineering Support

If requested by the Government by issuance of a delivery order, the Contractor shall provide engineering sustainment support for MIDS JTRS Problem Reports (JPRs), Investigation Requests (IRs), Engineering Change Proposal (ECP) and associated Regression Verification Plans (RVPs). As requested by the Government by issuance of a DO, the contractor shall provide retrofits, Block Cycle Upgrades, identified Hardware improvements, to include producibility, and Engineering Releases for the MIDS JTRS terminal. These efforts may include sustainment of and/or enhancements to service/platform capabilities such as Link 16 Waveform maintenance, Enhanced Throughput, Frequency Remapping, Crypto Modernization, CMN-4, Link 16 upgrades, TTNT, and Data Link governance. Additional upgrades may include other data links or radar beacon systems such as Intra-Flight Data Links (IFDL), Multifunctional Advanced Data Link (MADL), Common Data Link (CDL), Mobile User Objective System (MUOS), Identification Friend or Foe Transponder (IFFT) and High-bandwidth Networking Waveform (HNW).

3.2.1 System Engineering and Analysis

The Contractor, in conjunction with the other contractor, shall provide an update to the MIDS JTRS Systems Engineering Management Plan (SEMP) to reflect an ongoing production and sustainment support environment. The Contractor, in conjunction with the other contractor, shall update, maintain, and implement the SEMP for the systems engineering efforts associated with the Systems Engineering and Integration efforts of the MIDS JTRS. The Contractor, in conjunction with the other contractor, shall perform systems engineering management activities in accordance with the updated SEMP, and shall conduct analysis to identify the engineering support functions and requirements needed to produce, accept, operate, and maintain the MIDS JTRS Terminal configurations.
(CDRL B00M)

3.2.2 Engineering Sustainment Support

The Contractor shall provide engineering support for all efforts related to MIDS JTRS Problem Reports (JPRs), and, when authorized, perform additional investigations, and develop Rough Order of Magnitude (ROM) cost estimates. Additionally, the Contractor shall provide evaluation of Government-generated IRs and generation of ECPs and associated RVPs, when authorized, as a result of JPR and/or IR investigations. Security Management shall be provided to all DOs issued under this SOW through the annual JPR Engineering Sustainment Support DO.

3.2.2.1 MIDS JPR Resolution Process. In support of the JPR resolution process the contractor shall:

a. Develop and enter MIDS JTRS problem reports into the JPRvue database of MIDSvue. JPRs shall include, but not be limited to, MIDS JTRS integration, testing, installation and Casualty Reports;
b. Investigate all new JPRs and provide initial assessment within 30 days after its posting in JPRvue;
c. Upon Government approval investigate all new Non-Development Item (NDI) JPRs and provide initial assessment within 30 days;
d. At the end of each month, post to JPRvue the hours spent on investigation of each active JPR;
e. Once the initial investigation is completed, the contractor shall post all technical material regarding the JPR Investigation in JPRvue ;
f. If additional JPR Investigation is required, the contractor shall post a MIDS JTRS JPR Investigation Executive Report to JPRvue;
g. At all PRBs, conduct with MIDS Program Office a review of a pre-determined set of JPRs and their status;
h. Monitor and allocate resources to resolve all applicable JPRs and post all findings in JPRvue; and,
i. The contractor will obtain access to the JPRvue from the Government and be responsible for providing inputs to the JPRvue. The JPRvue is an Internet accessible on-line database through the overarching MIDSvue database and is maintained by the MIDS program Office (MPO).

3.2.2.2 Engineering Analysis and Test

The contractor shall perform trade studies, engineering evaluations, tests and provide Government test support related to platform integration, newly identified applications of the MIDS, configuration changes in the designated MIDS platforms and newly identified MIDS platforms.

3.2.2.3 Data Analysis and Interpretation

The contractor shall assist the Government personnel involved with specific technical investigations in the analysis and interpretation of the data arising from the investigations as deemed necessary by the DO.

3.2.2.4 MIDS JTRS Government Furnished Property (GFP) Maintenance and Repair

The contractor shall provide the engineering development and test of any required repair and/or modifications to the designated MIDS JTRS terminals.

3.2.2.5 Engineering Development, Test and Terminal Retrofit

The contractor shall provide the engineering development and test of any required modifications to the MIDS JTRS terminal. These modifications may be the result of new requirements or corrections of problems in the MIDS JTRS terminal hardware and/or software. The contractor shall also include the incorporation of retrofitting any developed modifications into fielded MIDS JTRS terminals.
(CDRLs B00N, B00P, B00Q)

3.2.3 Monthly JPR Progress Report

The Contractor shall report monthly a status of all active JPRs in a Monthly JPR Progress Report. The Contractor's Monthly JPR Progress Report shall include the hours expended for initial and additional investigation by DO for each active JPR and any closed JPR that hours were expended during the reporting period, in the format provided in Appendix A. Additionally, all hours for tasks charged under the specific DO will be listed as part of this report. These tasks include, but are not limited to, ECP development, IRs, and other Government-directed tasking under this DO. The formal titles of the ECPs and IRs shall be identified in the report.
(CDRL B00R)

3.2.4 Software Releases

The Contractor, in conjunction with the other contractor, shall deliver all developed and modified software and all COTS software procured to the Government subject to license restrictions of Clauses H-46. The Contractor, in conjunction with the other contractor, shall prepare and deliver a Software Version Description (SVD), the Software Executables and a Software Product Specification (SPS), and a product baseline ECP for each release of each CSCI and each Integrated Build (IB). The software environment, development tools and procedures shall also be documented in applicable SVDs.
(CDRLs B00S, B00T and B00U)

3.2.4.1 Analysis of New Software Requirements

The Contractor shall assess any new requirement raised by the Government in an Investigation Request (IR). The Contractor shall coordinate through the ACA how the modification will be apportioned between Link 16 Waveform, Radio Devices, Radio Services, Radio Security Services, MHAL, and COE CSCIs. The Contractor shall submit ECPs/NORs for the MIDS JTRS software, inclusive of Link 16 Waveform, Radio Devices, Radio Services, Radio Security Services, MHAL, and COE CSCI changes. The agreed solution will be proposed to the government through the ICWG.
(CDRL B00V and B00W)

The Contractor may also propose unsolicited engineering changes with an IR in accordance with the MPO's Configuration and Data Management Plan. The results of engineering analysis shall be delivered to the Government in a technical report. (CDRL B00X)

3.2.5 Block Cycle (BC)

3.2.5.1 Block Cycle Scope

The Contractor, in conjunction with the other contractor, shall implement approved ECPs and JTRS problem reports (JPRs) in Block Cycle releases of Link 16 Waveform, Radio Devices, Radio Services, Radio Security Services, MHAL, and COE CSCIs. The MPO Configuration Control Board (CCB) is responsible for defining the content of each software Block Cycle. The Government shall provide to the SE&I contractors a list of IRs/ECPs and JPRs that shall be implemented in the next software BC.

3.2.5.1.1 Block Cycle Implementation

The MPO shall provide BC requirements for the Link 16 Waveform, Radio Devices, Radio Services, Radio Security Services, MHAL, and COE CSCIs to the contractor. The Contractor, in conjunction with the other contractor, shall update the Radio Devices, Radio Services, Radio Security Services, MHAL, and COE CSCIs and the Link 16 Waveform to complete the requirements for the BC. The Contractor, in conjunction with the other contractor, shall provide a Joint Integrated Master Schedule (IMS) that reflects the BC development, integration and qualification tasking. The Contractor, in conjunction with the other contractor, shall provide software metrics.
(CDRLB00Y, B00Z)

The Contractor, in conjunction with the other contractor, shall develop a joint Formal Qualification Test (FQT) Software Test Plan. The Test Plan shall indicate where each test case is to be performed, the vendor(s) performing each test case and the requirements being verified. (CDRL B010)

The Contractor, in conjunction with the other contractor, shall develop FQT Software Test Description (CDRL B011). The Contractor, in conjunction with the other contractor, shall notify the Government 30 days prior to the start of FQT. The Government may witness the testing. For each software release, the Contractor, in conjunction with the other contractor, shall deliver all associated updated product baseline documentation dealing with software release (CDRL B00S, B00T, B00U, B012 and B013), and the Joint FQT test report (CDRL B014).

The Contractor, in conjunction with the other contractor, shall develop ECPs and NORs for IRs and applicable JPRs that affect the Functional and Allocated Baselines.
(CDRL B00V and CDRL B00W)

The Contractor, in conjunction with the other contractor, will coordinate the qualification activities with the MIDS JTRS production contractor using the ACA, in order to ensure that the common block cycle FQT will test the latest available software releases of the MIDS JTRS IB software. Each Block Cycle delivery shall include a compatibility matrix defining the delivery's compatibility with all previously released hardware configurations and software versions.

3.2.5.1.2 Engineering Releases (ER)

The contractor, in conjunction with the other contractor, shall implement urgent software corrections and develop all associated ECPs and/or NORs, as an Engineering Release.
(CDRL B00V and CDRL B00W)

The Contractor, in conjunction with the other contractor, shall develop the changes to the Link 16 Waveform, Radio Devices, Radio Services, Radio Security Services, MHAL, and COE and involve NSA in the review and approval of all changes.

The Contractor, in conjunction with the other contractor, shall test the engineering release software using existing and newly developed test cases. Upon the successful conclusion of the testing, the Contractor, in conjunction with the other contractor, shall deliver a software test report.

(CDRL B00X, B014)

3.2.6 MIDS JTRS Technical Meetings

3.2.6.1 MIDS JTRS Weekly Meetings

The Contractor shall participate in weekly meetings with the Government via telephone to provide status and to discuss and resolve any issues that may arise in the performance of the tasks associated with each DO awarded by the PCO under this SOW.

3.2.6.2 MIDS JTRS Technical Working Group (TWG)

The Contractor shall support a Government-chaired MIDS TWG. The TWG is the forum that provides the communication link between the MIDS JTRS SE&I and production contractors, the Government, and the senior technical and platform integrator representatives for resolving interface and technical issues. The TWG will be held in conjunction with the Problem Report Review (PRR) and Interface Control Working Group (ICWG).

3.2.6.3 MIDS JTRS Interface Control Working Group (ICWG)

The Contractor shall participate in the MIDS JTRS ICWG process. The objective of the ICWG process is to ensure that NORs to the Functional and Allocated Baselines that change the MIDS JTRS components are physically, functionally, and electrically backward/forward compatible among the different LRU/SRUs, Contractors and host platforms. The ICWG process is a forum for the MIDS JTRS contractors, and the Government to resolve technical issues concerning proposed changes and to concur with the technical wording of the specification change(s).

The Government shall chair the ICWG. After successful resolution of all interface and technical issues with the ECP and accompanying NOR(s), the designated contractor lead on the ECP shall submit a formal ECP to the Government within 30 calendar days after technical agreement. The submission will include estimated costs, schedule, implementation, and associated NOR(s) effectivity for its respective contract. If the other contractor is affected by the lead ECP, it shall submit a formal companion ECP describing the impact to its respective contract, which includes estimated cost, schedule and implementation effectivity within 30 calendar days after lead ECP agreement. If no impact applies, the Contractor shall notify the MPO via a concurrence submittal into MIDSvue.

The Contractor shall support weekly telephone conferences and online meeting service calls. The Contractor shall be prepared to respond to any open terminal issues and provide status. These meetings shall each be a maximum of one day in duration and will be held in conjunction with the PRR and TWG.

3.2.6.4 MIDS JTRS Problem Report Review (PRR) Meetings

The Contractor shall participate in face-to-face Government chaired MIDS JTRS PRRs and be prepared to address all active JPRs in addition to the pre-determined JPR list. PRRs have broad participation, including MPO personnel, production contractors, and Government in order to fully address the technical issues involving the Problem Reports. The PRR will be held in conjunction with the TWG and ICWG. PRRs shall be a maximum of one day in duration.

3.2.6.5 MIDS JTRS Problem Review Board (PRB) Meetings

The Contractor shall participate in PRBs. PRB will be held via telephone conference and online meeting services. The PRB is the Government-industry forum to address and monitor the status and disposition of problems and deficiencies reported against the MIDS JTRS terminals.

3.3 Configuration and Data Management

3.3.1 Configuration Management

The Contractor shall identify a single Point of Contact (POC) for all configuration management and control. The Contractor shall perform Configuration Management (CM) in accordance with the MIDS JTRS Configuration and Data Management Plan (CDMP) (PLAN-J-00001), the guidance of MIL-HDBK-61A, ANSI/EIA-649, and IEEE/EIA 12207. The Contractor shall prepare and submit for Government approval a MIDS JTRS Configuration Management Plan (CMP) documenting the Contractor's configuration management processes to conform to the requirements herein. The contractor's CMP must also provide details of the processes and interfaces required among the contractor, its associate contractors, and the Government. The Contractor shall meet as required with the Government to conduct CM coordination meetings to discuss CM-related actions and status.
(CDRL B015)

3.3.1.1 Configuration Control

The Contractor shall perform configuration control in accordance with the MIDS JTRS CDMP (PLAN-J-00001).

3.3.1.2 Part Numbers

The Contractor shall assign part numbers in accordance with the MIDS JTRS CDMP (PLAN-J-00001).

3.3.1.3 Serial Numbers

The Contractor shall assign serial numbers in accordance with the MIDS JTRS CDMP (PLAN-J-00001).

3.3.1.4 Engineering Change Proposals (ECPs)

The Contractor shall prepare and submit all ECPs, NORs, the NSA Questionnaire for ECPs, and the NSA INFOSEC Assessment Form, Attachment 9 and Attachment 10, in accordance with MIDS JTRS CDMP (PLAN-J-00001) to the Government for approval.
(CDRL B00V and B00W)

3.3.1.5 Investigation Request (IR)

The Contractor shall conduct IRs as requested by the COR/ACOR. IRs may consist of investigations for MIDS JTRS terminal upgrades and/or risk reduction efforts leading into Development efforts. Each IR will define the tasks to be accomplished under the applicable DO. The contractor shall submit a monthly Investigation Status Report to the COR/ACOR that contains each active IR under the applicable DO, the amount authorized by the Government and the amount expended by the contractor.

3.3.1.6 Nomenclature
The contractor shall assist the Government in requesting assignment of Joint Electronic Type Designation Automated System (JETDAS) nomenclature in accordance with MIL-STD-196 for the MIDS JTRS Terminal and each associated Line Replaceable Unit (LRU).

3.3.1.7 Regression Verification
The contractor shall conduct regression verifications and shall prepare and submit Regression Verification Procedures (RVPs) and Regression Verification Reports (RVRs) in accordance with the MIDS JTRS CDMP (PLAN-J-00001).
(CDRL B016 and B017)

3.3.2 Data Management
The Contractor shall identify a POC within the organization for data management efforts. The Contractor's Data Management team shall possess a thorough understanding of current data management techniques. The Contractor shall work with the Government to resolve all computer related compatibility issues with data deliveries.

3.3.2.1 Data Deliverables
The Contractor shall comply with the requirements of the CDRL General Instructions (Attachment 12).

3.3.2.2 Data Accession List
The Data Accession List (DAL) is a complete listing of all data, computer software and documentation generated by the Contractor during the course of performing the contract requirements (except for CDRL items identified elsewhere in the SOW). The PCO may order copies of any data, documentation or computer software identified in the DAL. If requested, electronic copies of the data shall be provided to the Government via the MIDSVue online database within 5 working days from the date of the request. The cost of furnishing such data or software shall be subject to payment pursuant to DFARS 252.227-7027 ("Deferred Ordering of Technical Data or Computer Software") under Section I.
(CDRL B018)

3.3.2.3 Requirements Traceability
The contractor, in conjunction with the other contractor, shall update the requirements traceability allocation Dynamic Object Oriented Requirements System (DOORS) databases resulting from the MIDS JTRS Phase 2B development and qualification effort with the Government approved FBL and ABL changes as a part of the ECP submitted under this task. The updated databases shall be submitted to the Government in accordance with the CDRL.
(CDRL B019)

3.4 MIDS JTRS AIMS Certifications
The Contractor shall conduct the applicable testing and analysis to provide the necessary measured data and required information to meet the Air Traffic Control Radar Beacon System, Identification Friend or Foe, Mark XII/Mark XIIA, Systems (AIMS) requirements identified in the AIMS 03-1000B and 04-0900 for the obtaining of AIMS certification. Any additional

required information in order to support the certification process is identified in the AIMS 03-1101B. At a minimum, the following additional information will be provided:

• Schedule of Testing/Meetings
• System Requirements Document / Equipment Specification
• Functional Bench Test (FBT) Plan or equivalent document
• Electromagnetic Interference (EMI) and Environmental Test Reports
• Software Description Document (SDD) / Version Description Document (VDD)
• Interface Verification Testing Results (1553, 429, Ethernet, etc.)
• Final Production Test (FPT) Plan / Automated Test Plan (ATP)
• Report of the applicable tests (or equivalent) contained in DO-181 and DO-260
• Crypto validation / Performance to 04-900

The required data and information shall be submitted to the Program Office via the AIMS Program Office, currently designated as the DoD International AIMS Program Office.

3.5 Contracting Officer's Representative (COR)
Name: Brianne Justiniani
Code: PMA/PMW 101
Address: 33050 Nixie Way, Bldg 17B, San Diego, CA 92147-5416
Phone Number: (757) 482-7587
E-mail: Brianne.Justiniani@navy.mil

3.6 Technical Direction
Technical Direction may be provided to the Contractor from time to time by the Contracting Officer or COR, if authorized, during the term (term is defined as the period of performance for the basic contract and any options that may be exercised) of this contract. Technical Direction will provide specific information relating to the tasks contained in the Statement of Work and will be provided to the contractor in writing. Any Technical Direction issued hereunder will be subject to the terms and conditions of the contract. The contract shall take precedence if there is any conflict with any Technical Direction issued hereunder, and cannot be modified by any Technical Direction.

As stated, Technical Direction shall be issued in writing and shall include, but not be limited to, the following information:
1) date of issuance of Technical Direction;
2) applicable contract number;
3) technical direction identification number;
4) description of Technical Direction;
5) estimated cost;
6) estimated level of effort by labor category; and
7) signature of the PCO/COR.

If the contractor does not agree with the estimated cost specified on the technical direction, or considers the technical direction to be outside the scope of the contract, he shall notify the PCO or COR immediately and, in the case of the estimated cost, arrive at a general agreement to the

cost of the task. In the case of the direction requiring work that is out of the scope of the contract, the contractor shall not proceed with the effort unless and until the PCO executes a contract modification to include the change in scope.

3.7 Other Security
The work to be performed includes access up to SECRET for data, information, and spaces. The contractor will be required to attend meetings classified up to the SECRET level.

The contractor shall perform all work in accordance with Department of Defense (DoD) and Navy Operations Security (OPSEC) requirements and in accordance with the OPSEC attachment to the DD254.

The Contractor's Facility Security Officer is required to ensure all personnel who access North Atlantic Treaty Organization (NATO) material are briefed and granted access into the NATO Program. This information must be entered into the Joint Personnel Adjudication System (JPAS).

The SSC Pacific NATO Control Officer/Alternate has reviewed the requirement supporting this contractual obligation and has approved the review/release of the following NATO documents:

STANAG 4175 - Technical Characteristics of the MIDS
STANAG 5516 - Tactical Data Exchange – Link 16
STANAG 4107 - Mutual Acceptance of Government Quality Assurance
AQAP 160 - NATO integrated quality requirements for software throughout the life cycle
AQAP 2110 - NATO Quality Assurance Requirements for Design, Development and Production
AQAP 2210 - NATO Supplementary Software Quality Assurance Requirements
NATO SDIP-27 Level A - Compromising Emanations Laboratory Test Standard

Note: In the event that subcontractor access to NATO documentation is needed on this contract, approval from the SSC Pacific NATO Control Officer/Alternate is required before access to any NATO documents is granted.

3.8 Offshore Procurement of COMSEC Equipment
Due to the unique sensitivity of Communications Security and to maintain rigid control over the integrity of COMSEC equipment, no subcontracts or purchase orders which involve design, manufacture, production, assembly or test in a location not in the United States, of equipment, assemblies, accessories or parts performing cryptographic functions shall be made under this contract without prior specific approval of the Contracting Officer. The Contractor further agrees to include this clause in any and all subcontracts he may let pursuant to this contract for equipment, assemblies, accessories or parts.

3.9 Contractor Identification
(a) Contractor employees must be clearly identifiable while on Government property by wearing appropriate badges.

(b) Contractor personnel and their subcontractors must identify themselves as contractors or subcontractors during meetings, telephone conversations, in electronic messages, or correspondence related to this contract.

(c) Contractor-occupied facilities (on Department of the Navy or other Government installations) such as offices, separate rooms, or cubicles must be clearly identified with Contractor supplied signs, name plates or other identification, showing that these are work areas for Contractor or subcontractor personnel.

3.10 Trademarks

The Contractor shall not assert any claim, in any jurisdiction, including but not limited to trademark infringement based on rights the Contractor believes it has in the term(s) under MIDS JTRS (the "Designation(s)") against the Government or others authorized by the Government to use the Designation(s) (including the word(s), name, symbol or designs). The Contractor acknowledges that these obligations with respect to the Designation(s) shall survive the expiration, completion, closeout, or termination of this contract.

APPENDIX A

Contract No:				Date:											
JPR Reporting Period:				Doc No:											
Delivery Order:															
Title	**WBS**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Total Cum**	**Comment**
Example: Govt Directed Tasking															
Sys Eng and Analysis															
JPR XXXX															
IR012 Multichannel update															
ECP MPOE-002 Label															

APPENDIX B

Item	Due Date	Action	POC	Status
1				
2				
3				
4				
5				